31. ~~78.~~ (New) The process according to Claims ~~9~~ 4 or ~~38~~ 15, wherein the exfoliative layer comprises at least one selected from the group consisting of polyisobutylene, polymethyl styrene, polymethacrylate, polymethacrylonitrile and polyvinylidene chloride.

32. ~~79.~~ (New) The method of Claims ~~17~~ 7, ~~41~~ 18, ~~59~~ 24 or ~~68~~ 25, wherein the exfoliative layer comprises at least one selected from the group consisting of polyisobutylene, polymethyl styrene, polymethacrylate, polymethacrylonitrile and polyvinylidene chloride.

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33. ~~80.~~ (New) The method of Claims ~~17~~ 7, ~~41~~ 18, ~~59~~ 24 or ~~68~~ 25, wherein the exfoliative layer comprises at least one selected from the group consisting of polyisobutylene, polymethyl styrene, polymethacrylate, polymethacrylonitrile and polyvinylidene chloride.

REMARKS

Applicants first would like to address a formal matter regarding the previous Office Action dated March 8, 2001 (paper no. 15). On page 5 of the Office Action, a rejection of Claims 1, 2, 49 and 53 under 35 U.S.C. § 102(b) was entered. However, the name of the reference was omitted in the rejection. Applicants presume that the rejection was entered over EP 0 893 250 A, since the Office Action indicates that the rejections are being entered over the references cited in the corresponding European application search report, and EP 0 893 250 A is the next-listed reference in the search report. Applicants respectfully request that the Examiner confirm that the § 102(b) rejection was entered over

EP 0 893 250 A. Further, Applicants respectfully request that the Examiner confirm that this rejection has been withdrawn.

This application has been carefully reviewed in light of the Office Action dated December 7, 2001 (paper no. 17). Claims 1 to 3, 9 to 11, 17, 20, 21, 23 to 27, 33 to 35, 41, 44, 45, 47, 48, 51, 55, 59, 63 and 73 to 80 are pending, with Claims 1, 9, 17, 25, 33, 41, 51, 55, 59 and 63 being independent claims. Reconsideration and further examination are respectfully requested.

Claims 9 to 24, 33 to 48 and 57 to 64 were withdrawn from consideration as being directed to a non-elected invention. Of these claims, 12 to 16, 18, 19, 22, 36 to 40, 42, 43, 46, 57, 58, 60 to 62 and 64 have been cancelled, and the remaining non-elected claims have been amended for consistency with the elected product claims. New Claims 77 to 80, also directed to the non-elected invention, have been added. Rejoinder of all of these claims is requested, under MPEP § 821.04, once the elected product claims have received an indication of allowability.

Claims 1 to 3, 25 to 27, 51, 55 and 60 to 72 were rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 6,075,202 (Mori '202). In response, the independent claims have been amended to include the subject matter of dependent Claims 65 and 69, which have been cancelled. Accordingly, this should be viewed as a traversal of the rejection of Claims 65 and 69. Further, Claims 66 to 68 and 70 to 72 have been cancelled without prejudice or disclaimer of the subject matter presented therein and without conceding the correctness of their rejection.

The invention, as recited by Claims 1 and 51, concerns a semiconductor device which includes a substrate, a filler, an exfoliative layer and a semiconductor

element. The exfoliative layer comprises an electron ray degradable resin. As set forth in Claim 1, the semiconductor element is detachable from the substrate. As set forth in Claim 51, at least one of the substrate, the filler, and the semiconductor element can be detached from the other constituent members by irradiating the exfoliative layer with electron rays.

The invention, as recited by Claims 25 and 55, concerns a solar cell module which includes a substrate, a filler, an exfoliative layer, a photovoltaic element and a protective layer. The exfoliative layer comprises an electron ray degradable resin. As set forth in Claim 25, the photovoltaic element is detachable from the substrate. As set forth in Claim 55, at least one of the substrate, the filler, the photovoltaic element and the protective layer can be detached from the other constituent members by irradiating the exfoliative layer with electron rays.

Thus, according to one feature of the invention, as recited by the presently elected claims, the exfoliative layer comprises an electron ray degradable resin. By virtue of this feature, the exfoliative layer can be degraded by electron ray irradiation and the detachment of faulty semiconductor device or solar cell module constituents can be facilitated.

In entering the rejection over Mori '202, the Office Action cites column 4, lines 10 to 21 and column 9, lines 45 to 60 in which a thermo-plastic resin sheet member is disclosed. This thermo-plastic resin may be heat degradable. However, Mori '202 is not seen to teach or suggest at least the feature of an electron ray degradable resin.

Moreover, the Office Action concedes that Mori '202 does not disclose an exfoliative layer. Rather, Mori '202 teaches that its thermo-plastic resin sheet member is used to assist in the removal of air when joining constituent members together. Yet,

apparently relying on "common knowledge" or "well-known art", the Office Action asserts that the invention would nevertheless have been obvious. Accordingly, Applicants respectfully request a citation in support of the position taken in the Office Action. See MPEP § 2144.03.

Applicants conclude that Mori does not teach or suggest the claimed invention. It is therefore respectfully requested that the Section 103(a) rejection be withdrawn. It is further requested that withdrawn Claims 9 to 24, 33 to 48 and 57 to 64 be rejoined.

Applicants submit that the present invention is patentably defined by the independent claims. Applicants submit that the dependent claims also are patentable for the same reasons and because they set forth additional aspects of the present invention in combination with the features of their respective base claims. Separate and individual consideration of each dependent claim is respectfully requested.

In view of the forgoing amendments and remarks, Applicants respectfully request favorable reconsideration and a Notice Of Allowance.

Applicants' undersigned attorney may be reached in our Costa Mesa, California office at (714) 540-8700. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,

Attorney for Applicants

Registration No. 40,595

FITZPATRICK, CELLA, HARPER & SCINTO
30 Rockefeller Plaza
New York, New York 10112-2200
Facsimile: (212) 218-2200

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APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE TO CLAIMS

1. (Three Times Amended) A semiconductor device comprising a substrate, a filler, an exfoliative layer and a semiconductor element which is detachable from the substrate, wherein the exfoliative layer comprises [a] an electron ray degradable resin.

9. (Amended) A process for producing a semiconductor device having a substrate, a filler, an exfoliative layer comprising an electron ray degradable resin, and a semiconductor element; the process comprising the step of producing the semiconductor device in such a way that the semiconductor element is [separable] detachable from the substrate.

10. (Amended) The process according to claim 9, which comprises the step of producing the semiconductor device so as to be [separable] detachable into a laminate having the semiconductor element, and the substrate.

11. (Amended) The process according to claim 9, wherein the semiconductor device further has a protective layer, and which process comprises the step of producing the semiconductor device so as to be [separable] detachable into a laminate having the semiconductor element and the protective layer.

17. (Amended) A method of dismantling a semiconductor device having a substrate, a filler, an exfoliative layer comprising an electron ray degradable resin, and a semiconductor element; the method comprising [separating] detaching the semiconductor element from the substrate.

20. (Amended) The method according to claim 17, wherein the [semiconductor device has an exfoliative layer, and the] exfoliative layer is [broken] degraded to [separate] detach constituent members.

25. (Three Times Amended) A solar cell module comprising a substrate, a filler, an exfoliative layer, a photovoltaic element which is detachable from the substrate, and a protective layer, wherein the exfoliative layer comprises [a] an electron ray degradable resin.

33. (Amended) A process for producing a solar cell module having a substrate, a filler, an exfoliative layer comprising an electron ray degradable resin, a photovoltaic element and a protective layer; the process comprising the step of producing the solar cell module in such a way that the photovoltaic element is [separable] detachable from the substrate.

34. (Amended) The process according to claim 33, which comprises the step of producing the solar cell module so as to be [separable] detachable into a laminate having the photovoltaic element, and the substrate.

35. (Amended) The process according to claim 33, which comprises the step of producing the solar cell module so as to be [separable] detachable into a laminate having the photovoltaic element, and the protective layer.

41. (Amended) A method of dismantling a solar cell module having a substrate, a filler, an exfoliative layer comprising an electron ray degradable resin, a photovoltaic element and a protective layer; the method comprising [separating] detaching the photovoltaic element from the substrate.

44. (Amended) The method according to claim 41, wherein [the solar cell module has an exfoliative layer, and] the exfoliative layer is [broken] degraded to [separate] detach constituent members.

51. (Twice Amended) A semiconductor device comprising a substrate, a filler, an exfoliative layer and a semiconductor element, wherein at least one of the substrate, the filler and the semiconductor element can be detached from the other constituent members by irradiating the [semiconductor device] exfoliative layer with electron rays, and wherein the exfoliative layer comprises an electron ray degradable resin.

55. (Twice Amended) A solar cell module comprising a substrate, a filler, an exfoliative layer, a photovoltaic element and a protective layer, wherein at least one of the

substrate, the filler, the photovoltaic element and the protective layer can be detached from the other constituent members by irradiating the [solar cell module] exfoliative layer with electron rays, and wherein the exfoliative layer comprises an electron ray degradable resin.

59. (Amended) A method of dismantling a semiconductor device having a substrate, a filler, an exfoliative layer comprising an electron ray degradable resin, and a semiconductor element; the method comprising irradiating the [semiconductor device] exfoliative layer with electron rays to [separate] detach at least one of the substrate, the filler and the semiconductor element from the other constituent members.

63. (Amended) A method of dismantling a solar cell module having a substrate, a filler, an exfoliative layer comprising an electron ray degradable resin, a photovoltaic element and a protective layer; the method comprising irradiating the [solar cell module] exfoliative layer with electron rays to [separate] detach at least one of the substrate, the filler, the photovoltaic element and the protective layer from the other constituent members.

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